
U.S. Department of the Interior • U.S. Geological Survey

MINERAL INDUSTRY SURVEYS

Gordon P. Eaton, Director

Reston, VA 20192

For information, contact:

Thomas S. Jones, Commodity Specialist

Telephone: (703) 648-4973, Fax: (703) 648-7757

E-mail: tjones@usgs.gov

Jesse Inestroza (Data), (703) 648-7968

MINES-DATA: (703) 648-7799

MINES FaxBack: (703) 648-4999

Internet: <http://minerals.er.usgs.gov/minerals>

MANGANESE IN MARCH 1997

In March, reported consumption of manganese ore containing 35% or more manganese, exclusive of that at iron and steel plants, was 39,900 metric tons, which was a moderate increase compared with that of the previous month, according to the U.S. Geological Survey. This brought the year to date total to 116,000 tons. These figures increase to 44,400 and 130,000 when estimates for annual respondents are added on the basis of 1994 data. Corresponding industry stocks of ore at the end of the month were estimated as 316,000 tons, which includes an estimate for annual respondents based on 1994 data. This was a moderate decrease in comparison with the corresponding figure for stocks at the end of February. (Data for the most recent 13 months are graphed on page 2.)

The next report of data on domestic consumption and stocks of manganese ferroalloys and metals will pertain to the January through March quarter of 1997.

Foreign trade data for March will appear in a subsequent report. The data for February tabulated in this report indicate that the quantity of manganese imported as ferromanganese was the least since August 1995. **Note:** For early availability, the February trade data appearing in this report were placed on FaxBack in preliminary form as of April 29. The FaxBack document number for these preliminary tables was 420202.

The Defense Logistics Agency (DLA), U.S. Department of Defense, reported for March a cash disposal from the National Defense Stockpile of 27,216 tons of high-carbon

ferromanganese under DLA-FERROMANGANESE-001, all to Elkem Metals Co., Marietta, OH.

Early in March, the international benchmark price for metallurgical-grade manganese ore was reduced approximately 5% when Japanese consumers came to agreement on price with major Australian and South African suppliers of ore. The new prices for delivery during the annual contract year were, on an f.o.b. basis per metric ton unit (mtu), \$2.08 for ore from Australia's Broken Hill Pty. Co. Ltd. and \$1.99 for South Africa's Samancor Ltd. Metal Bulletin reflected these developments in its March 20 issue by lowering its price range for manganese ore containing 48% to 50% manganese to \$1.99 to \$2.08 per mtu from \$2.09 to \$2.19.

In a two-part article published in the March 29 and April 5 issues of *Skilling's Mining Review*, Richard Strong describes the origins and development in Gabon of the Moanda Mine of Compagnie Minière de l'Ogooué S.A. (COMILOG). Covering events up until the late 1970's plus certain later ones, the first part of the article deals with discovery and exploration of the deposit and the second with development and operation of the mine (Strong, 1997).

Reference Cited

Strong, R., 1997, Comilog manganese mine, Gabon: *Skilling's Mining Review*, pt. 1, v. 86, no. 13, p. 4-19; pt. 2, v. 86, no. 14, p. 4-19.

TABLE 1
SELECTED U.S. FOREIGN TRADE IN MANGANESE 1/

(Metric tons, manganese content) 2/

	Imports for consumption			Exports		
	Ore and dioxide	Ferroalloy and metal	Total	Ore	Ferroalloy and metal	Total
1996:						
February	1,420	36,200	37,600	1,620	1,670	3,290
January-February	10,300 3/	83,300 3/	93,600	2,010	3,210	5,220
1997:						
January	14,900 3/	25,400	40,300	3,450	1,370	4,820
February	21,000	22,300	43,300	2,580	1,060	3,630
Total	35,900	47,700	83,600	6,030	2,420	8,450

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ As reported except as estimated for imports of manganese dioxide and manganese waste and scrap and for exports from gross weights.

3/ All or part of these data have been referred to the Bureau of the Census for verification.

Source: Bureau of the Census.

TABLE 2
U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN FEBRUARY 1997 1/

(Metric tons)

Source	Gross weight	Mn content	Customs value	Year to date		
				Gross weight	Mn content	Customs value
Australia	5,380	3,600	\$2,350,000	5,380	3,600	\$2,350,000
Georgia	2,440	1,710	1,360,000	2,440	1,710	1,360,000
India	2,690	1,880	1,160,000	3,070	2,090	1,490,000
Mexico	1,300	849	622,000	4,550	2,970	2,150,000
Norway	213	130	202,000	277	169	267,000
South Africa	--	--	--	12,700	8,550	5,900,000
Venezuela	2,800	1,830	1,220,000	2,800	1,830	1,220,000
Total	14,800	10,000	6,910,000	31,200	20,900	14,700,000
Total, general imports	12,400	8,290	5,560,000	28,800	19,200	13,400,000

1/ Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN FEBRUARY 1997 1/

(Metric tons)

Source	Gross weight	Mn content	Customs value	Year to date		
				Gross weight	Mn content	Customs value
Low carbon:						
Italy	462	414	\$723,000	462	414	\$723,000
Japan	--	--	--	1,500	1,210	1,320,000
Norway	4	4	2,610	4	4	2,610
South Africa	160	147	290,000	420	389	736,000
Total, low carbon	626	565	1,020,000	2,390	2,010	2,780,000
Total, general imports of low carbon	661	595	1,040,000	2,420	2,040	2,800,000
Medium carbon, 1%-2% C:						
Brazil	1,300	1,050	912,000	1,300	1,050	912,000
Japan	2,500	2,010	1,950,000	2,500	2,010	1,950,000
Mexico	1,120	900	792,000	5,040	4,050	3,640,000
Norway	320	260	221,000	320	260	221,000
South Africa	--	--	--	120	94	112,000
Total, m.c., 1%-2% C	5,240	4,220	3,870,000	9,280	7,460	6,830,000
Total, general imports of m.c., 1%-2% C	5,240	4,220	3,870,000	9,280	7,460	6,830,000
Medium carbon, 2%-4% C:						
Canada	19	8	2,120	101	40	13,400
Total, m.c., 2%-4% C	19	8	2,120	101	40	13,400
Total, general imports of medium carbon	19	8	2,120	101	40	13,400
High carbon:						
Australia	4,010	3,070	1,500,000	4,010	3,070	1,500,000
Brazil	4,510	3,430	1,630,000	8,010	6,100	3,030,000
South Africa	--	--	--	7,650	5,990	3,210,000
Total, high carbon	8,520	6,500	3,140,000	19,700	15,200	7,740,000
Total, general imports of high carbon	8,520	6,500	3,140,000	19,700	15,200	7,740,000
Grand total	14,400	11,300	8,030,000	31,400	24,700	17,400,000
Grand total, general imports	14,400	11,300	8,050,000	31,400	24,700	17,400,000

1/ Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

TABLE 4
U.S. IMPORTS 1/ OF MANGANESE ORE (20% OR MORE MN) IN FEBRUARY 1997 2/

(Metric tons)

Source	20% - 47% Mn		47% or more Mn		Total	
	Gross weight	Mn content	Gross weight	Mn content	Gross weight	Mn content
Gabon	--	--	26,200	13,100	26,200	13,100
Mexico	16,600	6,160	400	271	17,000	6,440
Total	16,600	6,160	26,600	13,400	43,200	19,500
Year to date:						
Belgium	--	--	6 3/	5 3/	6	5
Gabon	--	--	51,200	26,100	51,200	26,100
Mexico	18,100	6,760 4/	400	271	18,500	7,030
Total	18,100	6,760	51,600	26,400	69,700	33,100

1/ Quantities for general imports and imports for consumption are identical.

2/ Data are rounded to three significant digits; may not add to totals shown.

3/ All or part of these data have been referred to the Bureau of the Census for verification.

4/ Includes U.S. Geological Survey's conversion of part of reported data (from apparent MnO2 content to Mn content).

Source: Bureau of the Census.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE AND MANGANESE METAL IN FEBRUARY 1997 1/

(Metric tons, gross weight)

Source	Manganese dioxide				Manganese metal			
	Quantity	Customs value	Year to date		Unwrought		Other	
			Quantity	Customs value	Quantity	Year to date	Quantity	Year to date
Australia	1,840	\$2,550,000	2,850	\$3,940,000	--	--	--	--
Belgium	--	--	36	66,100	--	--	--	--
Brazil	--	--	64	88,400	--	--	--	--
China	165	198,000	165	198,000	220	420	--	--
France	--	--	--	--	--	--	3	15
Germany	16	82,400	24	121,000	--	--	--	(2/)
Ireland	173	242,000	954	1,360,000	--	--	--	--
Japan	--	--	7	8,110	--	--	--	--
Mexico	--	--	--	--	--	--	--	2
South Africa	212	287,000	473	653,000	749	1,620	--	--
Ukraine	--	--	--	--	40	40	--	--
United Kingdom	(2/)	4,220	(2/)	4,220	--	--	--	--
Total	2,410	3,360,000	4,570	6,440,000	1,010	2,080	3	18
Total, general imports	2,410	3,360,000	4,610	6,500,000	1,020	2,120	3	18

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Note: Imports for consumption of metallic manganese waste and scrap totaled 38 tons, all of which was from Canada, to give a year-to-date total of 74 tons.

Source: Bureau of the Census.

TABLE 6
U.S. EXPORTS OF MANGANESE ORE (20% OR MORE MN), FERROMANGANESE,
SILICOMANGANESE, AND MANGANESE METAL BY COUNTRIES OF DESTINATION IN FEBRUARY 1997 1/

(Metric tons, gross weight)

	Manganese ore		Ferromanganese, 2% or less C		Silicomanganese		Manganese metal 2/	
	February	Year to date	February	Year to date	February	Year to date	February	Year to date
Belgium	1,380	1,380	--	--	--	--	19	286
Brazil	--	--	--	--	--	--	77	116
Canada	200	413	362	838	94	212	114	253
Colombia	--	--	--	--	--	--	--	3
France	656	656	--	--	--	--	117	117
Hong Kong	--	--	--	--	--	--	4	4
Italy	910	1,290	--	--	--	--	--	--
Japan	--	--	--	--	--	--	55	183
Korea, Republic of	--	--	--	--	--	--	31	31
Mexico	--	--	--	20	38	109	5	14
Netherlands	466	6,100	--	3	8	8	36	36
Norway	1,530	2,210	--	--	--	--	--	--
Spain	--	--	--	--	--	9	--	--
Sweden	--	--	--	--	--	--	20	20
Switzerland	--	--	16	16	--	--	--	--
Taiwan	--	--	--	--	--	--	--	(3/)
United Kingdom	6	6	--	--	--	--	77	270
Venezuela	--	--	5	5	--	--	--	--
Total	5,150	12,100	384	882	140	338	556	1,330

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes manganese-aluminum, some other alloys, and waste and scrap.

3/ Less than 1/2 unit.

Note: Exports of ferromanganese with more than 2% carbon totaled 135 tons, of which 87 tons went to Canada, 46 tons went to Mexico, and 3 tons went to Ireland, to give a year-to-date total of 214 tons.

Source: Bureau of the Census.

TABLE 7
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN FEBRUARY 1997, BY CLASS 1/

Class	Gross weight (metric tons)	Value 2/ (thousands)	Principal sources and destinations: gross weight (metric tons); value (thousands) 2/	Year to date		
				Gross weight (metric tons)	Value 2/ (thousands)	Principal sources and destinations: gross weight (metric tons); value (thousands) 2/
<u>Imports for consumption:</u>						
Manganese oxides other than dioxide	50	\$118	Norway 20; \$13	170	\$343	South Africa 72; \$196
Sulfates, basket category, including manganese sulfate	1,220	880	Mexico 931; \$492	1,810	1,490	Mexico 1,330; \$879
Potassium permanganate	107	209	India 50; \$85	288	572	Czech Republic 90; \$174
Manganites, manganates, and other permanganates	--	--	--	1	7	Canada 1; \$7
<u>Exports:</u>						
Manganese dioxide	153	127	Canada 116; \$43	577	447	Canada 404; \$156
Manganese oxides other than dioxide	807	648	Canada 535; \$240	1,620	1,450	Canada 863; \$397
Sulfates, basket category, including manganese sulfate	2,130	1,150	Canada 1,810; \$647	3,880	2,050	Canada 3,280; \$1,170
Potassium permanganate	42	94	Canada 26; \$53	104	225	Ireland 47; \$98
Manganites, manganates, and other permanganates	9	73	Italy 7; \$57	36	358	Germany 18; \$127

1/ Data are rounded to three significant digits.

2/ For imports, Customs value; for exports, f.a.s. value.

Source: Bureau of the Census.